

Appl. No. 10/065,869
Docket No. 128653/GEM-0068

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REMARKS / ARGUMENTS

Status of Claims

Claims 1-28 are pending in the application. Claims 1, 2, 5, 6, 11-22, 25 and 26 stand rejected. Claims 3, 4, 7-10, 23, 24, 27 and 28 are objected to as being dependent upon a rejected claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's notation of the allowable claims. Applicant has amended Claims 1, 3, 5, 7, 11-21, 23, 25, and 27, and added new Claim 29, leaving Claims 1-29 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101, and 35 U.S.C. §102(b), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Objections to the Specification

The Examiner remarks that the disclosure is objected to under 37 CFR 1.71(a) because the language is inconsistent with itself and Figure 2.

Applicant has corrected typographical errors in Paragraphs [0020] and [0021] to cure the inconsistencies.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw these objections, which Applicant considers to be overcome.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 2, 6, 12, 16, 22 and 26 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

The Examiner comments that "it is noted each of these claims recites an equation including parameters denoted as "a", "b", and "c". However, each of these parameters a-c is not clearly defined as to what it refers to." [paper0806, p.5]

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Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that the parameters denoted as “a”, “b”, and “c”, are well known coefficients of constants of a general equation of a line, as described in various Algebra textbooks that predate the November 26 2002 filing date of the present invention. Applicant further respectfully submits that one of ordinary skill in the art would recognize that the parameters denoted as “a”, “b”, and “c” are coefficients of constants that define an equation of a line, such as the line of intersection as described in paragraph [0022] and Figure 4, reference numeral 62.

Applicant respectfully submits that “The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” MPEP 2164.01, citing *United States v Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988)

Applicant submits that one skilled in the art of the collection, manipulation, and distribution of medical images would be capable to recognize and determine the appropriate values of the coefficients of constants that define an equation of a line of intersection of the secondary images to the primary image plane, as described in paragraph [0022], without undue experimentation.

In view of the foregoing, Applicant respectfully submits that the claimed subject matter is described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection, which Applicant considers to be traversed.

Rejections Under 35 U.S.C. §101

Claims 11-20 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter as follows.

The Examiner alleges “However, the claims do not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., “When functional

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descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed storage medium can range from paper on which the program is written to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on ‘computer-readable medium’ in order to make the claim statutory.” [paper 0806, p. 6]

Applicant respectfully submits that Claims 11 and 15 recite, inter alia “A storage medium encoded with machine-readable computer program code for labeling orthogonal images, the storage medium including instructions *for causing a computer to implement a method...*”

Here, Applicant emphasizes the words “*machine-readable*” to indicate that the scope of the claimed storage medium is structurally and functionally interrelated. Further, Applicant submits that one of reasonable skill in the art would recognize that a “...machine-readable computer code...*for causing a computer to implement a method...*” is “a computer-readable medium”.

However, in an effort to further this application to allowance, Applicant has, without a narrowing of the scope of the claims, amended the subject claims to incorporate the Examiner’s suggestion to embody the program on a “computer-readable medium”. No new matter has been added as antecedent support may be found in the application as originally filed, such as at Paragraph [0028], and the claims as originally filed, for example.

These claims have not been amended to overcome the prior art and therefore, no presumption should attach that either the claims have been narrowed over those earlier presented, or that subject matter or equivalents thereof to which the Applicant is entitled has been surrendered.

In view of the foregoing, Applicant submits that this rejection has been traversed, and respectfully requests reconsideration and withdrawal thereof.

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Rejections Under 35 U.S.C. §102(e)

Claims 1, 5, 11, 15, 21 and 25 stand rejected under 35 U.S.C. §102(e) as being anticipated by Wahl et al. (U.S. Patent No. 6,359,960, hereinafter Wahl).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the *** claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicant has amended Claims 1, 5, 11, and 15 to now recite, inter alia:

“...identifying a primary image taken in *a first sagittal plane*;

identifying a plurality of secondary images taken in *axial planes orthogonal to the first sagittal plane ...*”

Applicant has amended Claims 21 and 25 to now recite, inter alia:

“...an imaging device configured to provide a primary image and a plurality of secondary images of the target body, the primary image being taken *at a first sagittal plane through the target body and the secondary images being taken at second axial planes through the target body and orthogonal to the first sagittal plane...*”

No new matter has been added by these amendments as antecedent support may be found in the specification as originally filed, such as at Paragraph [0020] for example.

Dependent claims inherit all of the limitations of the respective parent claim.

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Regarding Claim 1

In alleging anticipation of Claim 1, the Examiner remarks "Wahl teaches method of labeling orthogonal images (i.e. figures 1-2 and 5) comprising: identifying a primary image taken in a first plane (see figure 1 and col. 4 lines 14-22: note 3D volume data set acquired from the series of 2D projections; also see figure 2 for plurality of 2D projection planes denoted at P1-P4); identifying a plurality of secondary images taken in planed orthogonal to the first plane (see figure 1 and col. 4 lines 14-22: note 3D volume data set acquired from the series of 2D projections; also see figure 2 for plurality of 2D projection planes denoted at P1-P4)." [paper 0806, p.6-7]

Applicant finds Wahl to disclose "...from the series of 2D projections of the head 1 of the patient that are picked up upon rotation of the X-ray system..." [Wahl, col. 4, lines 17-18]. Applicant respectfully submits that Wahl is absent the now claimed for "...identifying a *primary image taken in a first sagittal plane*; identifying a *plurality of secondary images taken in axial planes orthogonal to the first sagittal plane ...*" in Claims 1, 5, and 11. Applicant further submits that Wahl is absent the now claimed for "...imaging device configured to provide a primary image and a plurality of secondary images of the target body, the *primary image being taken at a first sagittal plane through the target body and the secondary images being taken at second axial planes through the target body and orthogonal to the first sagittal plane...*"

Accordingly, Applicant submits that Wahl does not disclose each and every element of the claimed invention, arranged as in the claim, and absent anticipatory disclosure in Wahl of each and every element of the claimed invention arranged as in the claim, Wahl cannot be anticipatory.

In view of the amendment and foregoing remarks, Applicant submits that Wahl does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

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Regarding Claims 11 and 21

The Examiner remarks "It is noted that Claims 11 and 21 recite similar features called for in claim 1 above. Thus, claims 11 and 21 are also rejected for the same reasons as set forth above." [paper 0806, p. 7]

Applicant submits that for at least the same reasons as set forth above in response to Claim 1, Wahl does not disclose each and every element of the claimed invention, arranged as in the claim, and absent anticipatory disclosure in Wahl of each and every element of the claimed invention arranged as in the claim, Wahl cannot be anticipatory.

Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Regarding Claims 5, 15, and 25

The Examiner remarks "It is noted that these claims recite similar features called out for in claim 1 with additional of claimed "first and second labels". The advance statements applied to claim 1 above are incorporated herein. Wahl further teaches labels (see markers 6', 9', 6, 9, 6.1-6.4, 7.1-7.4, 8.1-8.4, and 9.1-9.4 mentioned in col. 4 lines 23-43 and figures 1-2. Note that any two markers mentioned in this cited portion refers to the so called first and second labels.)" [paper 0806, p. 7]

Applicant submits that for at least the same reasons as set forth above in response to Claim 1, Wahl does not disclose each and every element of the claimed invention, arranged as in the claim, and absent anticipatory disclosure in Wahl of each and every element of the claimed invention arranged as in the claim, Wahl cannot be anticipatory.

Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §101, and 35 U.S.C.

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§102(e), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Regarding Allowable Subject Matter

Claims 2, 6, 22 and 26 are objected to as being dependent upon a rejected base claim and being rejected under 35 U.S.C. §112, second paragraph, as set forth in the instant office action, but would be allowable if rewritten: (a) in independent form including all limitations of the base claim and any intervening claims and (b) to overcome the rejections under 35 U.S.C. §112, second paragraph.

Claims 3, 4, 7-10, 23, 24, 27 and 28 are objected to for reasons relating to being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

Applicant has provided remarks as set forth above, and has amended Claims 1, 5, 21, and 25 to also overcome these objections.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw these objections, which Applicant considers to be overcome.

Regarding New Claim 29

Applicant has added new Claim 29, which depends from Claim 1, to now claim disclosed but previously unclaimed subject matter. No new matter has been added as antecedent support may be found in the application as originally filed, such as at Paragraph [0021] for example.

In view of the amendment and remarks set forth above regarding the allowability of Claim 1, Applicant submits that new Claim 29 is directed to allowable subject matter and respectfully requests entry and notice of allowance thereof.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845.

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In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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